

Abstract

Disclosed is to provide a modified polyester filament, which is formed by spinning the polyester resin composed of ethylene terephthalate more than 85 mol% as main component repeating unit, and component A organic sulfonate shown as the formula listed below



[wherein R is selected from alkyl group of carbon 3 to 30, aromatic group and alkyl aromatic group of carbon 7 to 40; M is selected from alkali metal, alkali earth metal] and component B polyalkylene glycol and satisfies the following three conditions

- (1) the content of said component A RSO_3M is from 0.4 weight% to 5 weight %;
- (2) the content of said component B polyalkylene glycol is from 0.4 weight% to 5 weight%;
- (3) said polyester filament obtained by spinning is subjected to alkali treatment to reduce the weight in an amount of 5-45% with 60~130 °C alkali solution of concentration 0.2 to 8.0 weight%, dyeing to get polyester filament having 0.1~0.001 d.p.f. (denier per filament) ultrafine fluffs thereon

Fabric woven by using the hetero-shrinkage conjugate polyester filament textured yarn made by combining the modified polyester filament with high boiling water shrinkage filament and draw twisting has soft, puffy, dry feeling and natural fiber like hand, can elevate the commercial value of polyester filament, suitable to high grade clothing.